



DEPARTMENT OF THE ARMY
PROGRAM EXECUTIVE OFFICE, TACTICAL MISSILES
REDSTONE ARSENAL, ALABAMA 35898-8000

REPLY TO
ATTENTION OF

SFAE-MSL-ML (70-lr)

10 JUL 1998

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: MLRS Newsletter

1. I am pleased to send you the twelfth issue of MLRS FEEDBACK. This newsletter answers questions received from the field and provides information of interest to MLRS operators and maintainers. Please make and distribute copies.
2. We encourage questions and comments from all MLRS soldiers. These may be referred to us through your local MLRS Logistics Assistance Representative (LAR), or by writing directly to the address at the end of the Newsletter. Also note that electronic mail addresses have been added to the address information.

BARRY M. WARD
COL, FA
Project Manager, MLRS
Project Office

DISTRIBUTION:

Headquarters, Department of the Army, ATTN: SARD-SM (DASC MLRS), Washington, DC 20310-0103 (2)

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PM, BFVS, ATTN: SFAE-ASM-BV (MAJ Colvin), Warren, MI 48397-5000 (6)

Headquarters, EUSA, ATTN: FKJ4-MS-L-MI, APO, AP 96205-0009 (2)

Commander, 2nd ID DIVARTY, ATTN: EAID-AT-CO, APO, AP 96257-0623 (2)

Commander, 6th Bn, 37th FA, ATTN: EAID-AD, APO, AP 96257-0224 (2)

Commander, HHS, 6th Bn, 37th FA, ATTN: EAID-AD, APO, AP 96257-0224 (2)

Commander, A Btry, 6th Bn, 37th FA, ATTN: EAID-AD, APO, AP 96257-0224 (2)

Commander, B Btry, 6th Bn, 37th FA, ATTN: EAID-AD, APO, AP 96257-0224 (2)

Commander, C Btry, 6th Bn, 37th FA, ATTN: EAID-AD, APO, AP 96257-0224 (2)

Commander, A Btry, 38th FA, ATTN: EAID-AD, APO, AP 96257-0224 (2)

Commander, E Co., 702nd MSB, Unit #15412, APO, AP 96257-0232 (2)



Chief, USALAO, Unit #15353, APO, AP 96258-0076 (2)

Commander, HQ, USAMC-E, Unit #29331, ATTN: AMXEU-L-MICOM-MLRS, APO AE 09266 (2)

Commander, V Corps Artillery, ATTN: AETV-AT-CG, Unit # 23705, APO, AE 09096 (2)

Commander, 41st FA Bde, ATTN: AETV-ATA-CO, APO, AE 09089 (2)

Commander, 1st Bn, 27th FA, ATTN: AETV-ATA-Q, APO, AE 09089 (2)

Commander, HHS, 1st Bn, 27th FA, APO, AE 09089 (2)

Commander, A Btry, 1st Bn, 27th FA, APO, AE 09089 (2)

Commander, B Btry, 1st Bn, 27th FA, APO, AE 09089 (2)

Commander, C Btry, 1st Bn, 27th FA, APO, AE 09089 (2)

Commander, 71st Ordnance Co., ATTN: Missile Maintenance Shop Officer, APO AE 09165 (2)

Commander, 1st ID (M) DIVARTY, Unit # 23741, APO, AE 09139 (2)

Commander, A Btry, 33rd FA, ATTN: AETS-FAB, APO, AE 09139 (2)

Commander, 1st AD DIVARTY, ATTN: AETV-THT, APO, AE 09034 (2)

Commander, A Btry, 94th FA, ATTN: AETV-THT-PA, APO, AE 09034 (2)

Commander, 563rd Maintenance Co., CMR 403, ATTN: Shop Officer, APO AE 09059 (2)

Commander, HHC SSA, Unit 31314, Box 18, APO AE 09630 (2)

Commandant, US Army Field Artillery School, ATTN: ASTF-GR (MLRS), Fort Sill, OK 73503 (2)

Commandant, US Army Field Artillery School, ATTN: ASTF-RMS, Fort Sill, OK 73503 (2)

Commandant, US Army Field Artillery School, ATTN: ASTF-CD-MRI, Fort Sill, OK 73503 (2)

USA AMC LAO – Fort Sill, ATTN: AMXLS-F-FS, Fort Sill, OK 73503-5000 (2)

Directorate of Logistics, Chief of Maintenance, Fort Sill, OK 73503-5000 (2)

Commander, III Corps Artillery, ATTN: AFVI-CG, Fort Sill, OK 73503-5000 (2)

Commander, III Corps Artillery, ATTN: AFVI-G4, Fort Sill, OK 73503-5000 (2)

Commander, 19th Maintenance Bn, ATTN: AFVI-O, Fort Sill, OK 73503-6001 (2)

Commander, 226th Maintenance Co, ATTN: AFVI-MM, Fort Sill, OK 73503 (2)

Commander, 588th Maintenance Co, ATTN: AFVI-OE, Fort Sill, OK 73503 (2)

Commander, 17th FA Bde, ATTN: AFVI-D, Fort Sill, OK 73503-5000 (2)

Commander, 5th Bn, 3rd FA, ATTN: AFVI-DG, Fort Sill, OK 73503-5000 (2)

Commander, HHS, 5th Bn, 3rd FA, Fort Sill, OK 73503-5000 (2)

Commander, A Btry, 5th Bn, 3rd FA, Fort Sill, OK 73503-5000 (2)

Commander, B Btry, 5th Bn, 3rd FA, Fort Sill, OK 73503-5000 (2)

Commander, C Btry, 5th Bn, 3rd FA, Fort Sill, OK 73503-5000 (2)

Commander, 1st Bn, 12th FA, ATTN: AFVI-DE, Fort Sill, OK 73503-5000 (2)
 Commander, HHS, 1st Bn, 12th FA, Fort Sill, OK 73503-5000 (2)
 Commander, A Btry, 1st Bn, 12th FA, Fort Sill, OK 73503-5000 (2)
 Commander, B Btry, 1st Bn, 12th FA, Fort Sill, OK 73503-5000 (2)
 Commander, C Btry, 1st Bn, 12th FA, Fort Sill, OK 73503-5000 (2)

Commander, 75th FA Bde, ATTN: AFVI-A-CO, Fort Sill, OK 73503-5000 (2)

Commander, 1st Bn, 77th FA, ATTN: AFVI-AC, Fort Sill, OK 73503-5000 (2)
 Commander, HHS, 1st Bn, 77th FA, Fort Sill, OK 73503-5000 (2)
 Commander, A Btry, 1st Bn, 77th FA, Fort Sill, OK 73503-5000 (2)
 Commander, B Btry, 1st Bn, 77th FA, Fort Sill, OK 73503-5000 (2)
 Commander, C Btry, 1st Bn, 77th FA, Fort Sill, OK 73503-5000 (2)

Commander, 6th Bn, 27th FA, ATTN: AFVI-AB, Fort Sill, OK 73503-5000 (2)
 Commander, HHS, 6th Bn, 27th FA, Fort Sill, OK 73503-5000 (2)
 Commander, A Btry, 6th Bn, 27th FA, Fort Sill, OK 73503-5000 (2)
 Commander, B Btry, 6th Bn, 27th FA, Fort Sill, OK 73503-5000 (2)
 Commander, C Btry, 6th Bn, 27th FA, Fort Sill, OK 73503-5000 (2)

Commander, 212th FA Bde, ATTN: AFVI-B-CO, Fort Sill, OK 73503-5000 (2)

Commander, 2nd Bn, 18th FA, ATTN: AFVI-BB, Fort Sill, OK 73503-5000 (2)
 Commander, HHS, 2nd Bn, 18th FA, Fort Sill, OK 73503-5000 (2)
 Commander, A Btry, 2nd Bn, 18th FA, Fort Sill, OK 73503-5000 (2)
 Commander, B Btry, 2nd Bn, 18th FA, Fort Sill, OK 73503-5000 (2)
 Commander, C Btry, 2nd Bn, 18th FA, Fort Sill, OK 73503-5000 (2)

Commander, 6th Bn, 32nd FA, ATTN: AFVI-BE, Fort Sill, OK 73503-5000 (2)
 Commander, HHS, 6th Bn, 32nd FA, Fort Sill, OK 73503-5000 (2)
 Commander, A Btry, 6th Bn, 32nd FA, Fort Sill, OK 73503-5000 (2)
 Commander, B Btry, 6th Bn, 32nd FA, Fort Sill, OK 73503-5000 (2)
 Commander, C Btry, 6th Bn, 32nd FA, Fort Sill, OK 73503-5000 (2)

Commander, 214th FA Bde, ATTN: AFVI-C-CO, Fort Sill, OK 73503-5000 (2)

Commander, 2nd Bn, 4th FA, ATTN: AFVI-CE, Fort Sill, OK 73503-5000 (2)
 Commander, HHS, 2nd Bn, 4th FA, Fort Sill, OK 73503-5000 (2)
 Commander, A Btry, 2nd Bn, 4th FA, Fort Sill, OK 73503-5000 (2)
 Commander, B Btry, 2nd Bn, 4th FA, Fort Sill, OK 73503-5000 (2)
 Commander, C Btry, 2nd Bn, 4th FA, Fort Sill, OK 73503-5000 (2)

Commander, 1st Bn, 14th FA, ATTN: AFVI-517, Fort Sill, OK 73503-5000 (2)
 Commander, HHS, 1st Bn, 14th FA, Fort Sill, OK 73503-5000 (2)
 Commander, A Btry, 1st Bn, 14th FA, Fort Sill, OK 73503-5000 (2)
 Commander, B Btry, 1st Bn, 14th FA, Fort Sill, OK 73503-5000 (2)
 Commander, C Btry, 1st Bn, 14th FA, Fort Sill, OK 73503-5000 (2)

Commander, 3rd Bn, 13th FA, ATTN: AETV-ATA-O, Fort Sill, OK 73503-5000 (2)
 Commander, HHS, 3rd Bn, 13th FA, Fort Sill, OK 73503-5000 (2)
 Commander, A Btry, 3rd Bn, 13th FA, Fort Sill, OK 73503-5000 (2)
 Commander, B Btry, 3rd Bn, 13th FA, Fort Sill, OK 73503-5000 (2)
 Commander, C Btry, 3rd Bn, 13th FA, Fort Sill, OK 73503-5000 (2)

Commander, 1st Cavalry Division DIVARTY, ATTN: AFVA-AT-CO, Fort Hood, TX 76545-5103 (2)
 Commander, 1st Bn, 21st FA, ATTN: AFVA-1-21-C, Fort Hood, TX 76545-5103 (2)
 Commander, HHS, 1st Bn, 21st FA, Fort Hood, TX 76545-5103 (2)
 Commander, A Btry, 1st Bn, 21st FA, Fort Hood, TX 76545-5103 (2)
 Commander, B Btry, 1st Bn, 21st FA, Fort Hood, TX 76545-5103 (2)
 Commander, E Co, 27th MSB, ATTN: Shop Officer, Fort Hood, TX 76544 (2)
 Commander, 4th Infantry Division (M) DIVARTY, ATTN: AFZA-D-CO, Fort Hood, TX 76544 (2)
 Commander, B Btry, 20th FA, Fort Hood, ATTN: AFVC-W-CO, TX 76544 (2)
 Commander, E Co, 704th MSB, ATTN: Shop Officer, Fort Hood, TX 76544 (2)
 Commander, XVIII Abn Corps Artillery, ATTN: AFZA-FA-CO, Fort Bragg, NC 28307 (2)
 Commander, 18th FA Bde, ATTN: AFZA-AR-CO, Fort Bragg, NC 28307 (2)
 Commander, 3rd Bn, 27th FA, ATTN: AFVZ-AR-K, Fort Bragg, NC 28307 (2)
 Commander, HHS, 3rd Bn, 27th FA, Fort Bragg, NC 28307 (2)
 Commander, A Btry, 3rd Bn, 27th FA, Fort Bragg, NC 28307 (2)
 Commander, B Btry, 3rd Bn, 27th FA, Fort Bragg, NC 28307 (2)
 Commander, C Btry, 3rd Bn, 27th FA, Fort Bragg, NC 28307 (2)
 USA LAO, ATTN: Gary Wade, Bldg MT-6726, Fort Bragg, NC 28301 (2)
 Commander, 39th Ordnance Co, ATTN: Shop Officer, Fort Bragg, NC 28307-5000 (2)
 Commander, 3rd Infantry Division (M) DIVARTY, ATTN: AFZP-VF-CO, Fort Stewart, GA 31314 (2)
 Commander, A Btry, 13th FA, ATTN: AFZP-VFS-B, Fort Stewart, GA 31314 (2)
 Commander, E Co, 703th MSB, ATTN: Shop Officer, Fort Stewart, GA 31314 (2)
 Commander, 1st Bn, 158th FA, P.O. Box 2335, Lawton, OK 73502-2335 (2)
 Commander, HHS, 1st Bn, 158th FA, P.O. Box 2335, Lawton, OK 73502-2335 (2)
 Commander, A Btry, 1st Bn, 158th FA, P.O. Box 2335, Lawton, OK 73502-2335 (2)
 Commander, B Btry, 1st Bn, 158th FA, P.O. Box 2335, Lawton, OK 73502-2335 (2)
 Commander, C Btry, 1st Bn, 158th FA, P.O. Box 2335, Lawton, OK 73502-2335 (2)
 Commander, 1st Bn, 171st FA, P.O. Box 615, Altus, OK 73522-0615 (2)
 Commander, HHS, 1st Bn, 171st FA, P.O. Box 615, Altus, OK 73522-0615 (2)
 Commander, A Btry, 1st Bn, 171st FA, P.O. Box 615, Altus, OK 73522-0615 (2)
 Commander, B Btry, 1st Bn, 171st FA, P.O. Box 615, Altus, OK 73522-0615 (2)
 Commander, C Btry, 1st Bn, 171st FA, P.O. Box 615, Altus, OK 73522-0615 (2)
 Unit Training Equipment Site #2, OK ARNG, P.O. Box 3306, Ft. Sill, OK 73503-0067 (2)
 Commander, 1st Bn, 182nd FA, 3030 McGraw, Detroit, MI 48208-1511 (2)
 Commander, HHS, 1st Bn, 182nd FA, 3030 McGraw, Detroit, MI 48208-1511 (2)
 Commander, A Btry, 1st Bn, 182nd FA, 3030 McGraw, Detroit, MI 48208-1511 (2)
 Commander, B Btry, 1st Bn, 182nd FA, 3030 McGraw, Detroit, MI 48208-1511 (2)

Commander, C Btry, 1st Bn, 182nd FA, 3030 McGraw, Detroit, MI 48208-1511 (2)

Chief, Mobilization and Training Equipment Site, 1400 North River Road, Grayling, MI 49738-9802 (2)

Commander, 138th FA Bde, 4201 Parkersmill Rd, Lexington, KY 40513-5138 (2)

Commander, 1st Bn, 623rd FA, 410 Cavalry Drive, Glasgow, KY 42141-1045 (2)

Commander, HHS, 1st Bn, 623rd FA, 410 Cavalry Drive, Glasgow, KY 42141-1045 (2)

Commander, A Btry, 1st Bn, 623rd FA, 410 Cavalry Drive, Glasgow, KY 42141 (2)

Commander, B Btry, 1st Bn, 623rd FA, 410 Cavalry Drive, Glasgow, KY 42141 (2)

Commander, C Btry, 1st Bn, 623rd FA, 410 Cavalry Drive, Glasgow, KY 42141 (2)

Commander, Mobilization & Equipment Site, Bldg 6560, North Delaware & 2nd Dragoons Rd, Ft. Knox, KY 40121-5000 (2)

Commander, 1st Bn, 181st FA, 1801 Holtzclaw Ave, Chattanooga, TN 37404-4806 (2)

Commander, HHS, 1st Bn, 181st FA, 1801 Holtzclaw Ave, Chattanooga, TN 37404 (2)

Commander, A Btry, 1st Bn, 181st FA, 1801 Holtzclaw Ave, Chattanooga, TN 37404-4806 (2)

Commander, B Btry, 1st Bn, 181st FA, 1801 Holtzclaw Ave, Chattanooga, TN 37404-4806 (2)

Commander, C Btry, 1st Bn, 181st FA, 1801 Holtzclaw Ave, Chattanooga, TN 37404-4806 (2)

Commander, 3rd Bn, 116th FA, 4004 Airport Rd, Plant City, FL 33567-4076 (2)

Commander, HHS, 3rd Bn, 116th FA, 4004 Airport Rd, Plant City, FL 33567-4076 (2)

Commander, A Btry, 3rd Bn, 116th FA, 4004 Airport Rd, Plant City, FL 33567-4076 (2)

Commander, B Btry, 3rd Bn, 116th FA, 4004 Airport Rd, Plant City, FL 33567-4076 (2)

Commander, C Btry, 3rd Bn, 116th FA, 4004 Airport Rd, Plant City, FL 33567-4076 (2)

Commander, 130th FA Bde, 2722 SW Topeka Blvd., Topeka, KS 66611-1287 (2)

Commander, 2nd Bn, 130th FA, P.O. Box 120, 108 North 1st Street, Hiawatha, KS 66434-0120 (2)

Commander, HHS, 2nd Bn, 130th FA, P.O. Box 120, 108 North 1st Street, Hiawatha, KS 66434-0120 (2)

Commander, Det 1, HHS, 2nd Bn, 130th FA, 16 Main St., Sebetha, KS 66534-2323 (2)

Commander, A Btry, 2nd Bn, 130th FA, 306 N. 19th St., Marysville, KS 66508-1688 (2)

Commander, Det 1, Btry A, 2nd Bn, 130th FA, Airport Rd, Concordia, KS 66901-0428 (2)

Commander, B Btry, 2nd Bn, 130th FA, 444 E. 15th St. Horton, KS 66439-0268 (2)

Commander, Det 1, B Btry, 2nd Bn, 130th FA, 407 N. 17th St., Atchison, KS 66002-1501 (2)

Commander, Det 2, B Btry, 2nd Bn, 130th FA, 530 N. Jones St., Troy, KS 66087-0416 (2)

Commander, C Btry, 2nd Bn, 130th FA, 1127 Armory Rd, Salina, KS 67401-4099 (2)

Commander, Det 1, C Btry, 2nd Bn, 130th FA, 1009 NW 8th St., Abilene, KS 67410-2364 (2)

Commander, Mobilization and Training Equipment Site, P.O. Box 2345, ATTN: CWO Ring, Fort Riley, KS 66442-2345 (2)

Commander, 3rd Bn, 178th FA, P.O. Drawer 519, Lancaster, SC 29721-0519 (2)

Commander, HHS, 3rd Bn, 178th FA, P.O. Drawer 519, Lancaster, SC 29721-0519 (2)

Commander, A Btry, 3rd Bn, 178th FA, P.O. Drawer 519, Lancaster, SC 29721-0519 (2)

Commander, B Btry, 3rd Bn, 178th FA, P.O. Drawer 519, Lancaster, SC 29721-0519 (2)

Commander, C Btry, 3rd Bn, 178th FA, P.O. Drawer 519, Lancaster, SC 29721-0519 (2)

Commander, 1st Bn, 147th FA, 801 W. National Guard Dr., Sioux Falls, SD 57104-0117 (2)

Commander, HHS, 1st Bn, 147th FA, 801 W. National Guard Dr., Sioux Falls, SD 57104-0117 (2)

Commander, A Btry, 1st Bn, 147th FA, 801 W. National Guard Dr., Sioux Falls, SD 57104-0117 (2)

Commander, B Btry, 1st Bn, 147th FA, 801 W. National Guard Dr., Sioux Falls, SD 57104-0117 (2)

Commander, C Btry, 1st Bn, 147th FA, 801 W. National Guard Dr., Sioux Falls, SD 57104-0117 (2)

Commander, 1st Bn, 142nd FA, Route 6, Box 307, Harrison, AR 72601-8834 (2)
 Commander, HHS, 1st Bn, 142nd FA, Route 6, Box 307, Harrison, AR 72601-8834 (2)
 Commander, A Btry, 1st Bn, 142nd FA, Route 6, Box 307, Harrison, AR 72601-8834 (2)
 Commander, B Btry, 1st Bn, 142nd FA, Route 6, Box 307, Harrison, AR 72601-8834 (2)
 Commander, C Btry, 1st Bn, 142nd FA, Route 6, Box 307, Harrison, AR 72601-8834 (2)

United Defense LP, Ground Systems Division, ATTN: Mr. John Root, P.O. Box 367, San Jose, CA 95103 (2)

United Defense LP, MLRS Program Liaison, ATTN: Larry Gibbs, 100 Bairs Chapel Road, York, PA 17404 (2)

General Dynamics Defense Systems, ATTN: Transmission Programs (Mr. John Giganti), 100 Plastics Ave., Pittsfield, MA 01201-3698 (2)

Lockheed Martin Vought Systems, P.O. Box 650003, M/S 60, ATTN: Mr. Don Shipp, Dallas, TX 75265-0003 (2)

Lockheed Martin Vought Systems, P.O. Box 650003, M/S MC-40 ATTN: Mr. Howard Mortimer, Dallas, TX 75265-0003 (6)

Lockheed Martin Vought Systems, P.O. Box 650003, M/S MC-25, ATTN: Mr. C.H. McKinley, Dallas, TX 75265-0003 (2)

Commander, U.S. Embassy Bahrain, ATTN: OMC SGT Davis FPO AE 09834 (2)

Office of Defense Cooperation, Copenhagen, American Embassy, PSC #73, ODC, APO AE 09716 (2)

Commander, 200th TAMMC, ATTN: AERLA-MMC-ATMD (missiles), Unit 23203, APO AE 09263 (2)

NATO Maintenance and Supply Agency, ATTN: LM, Unit 4045 PSC9, APO AE 09126-4045 (2)

American Embassy, Denmark, PSC 73, ODC, APO AE 09716 (2)

American Embassy, Norway, USODC, PSC 69 Box 1000, APO AE 09707 (2)

Office of Defense Cooperation, ATTN: Army Directorate, Ankara Turkey, PSC 90 Unit 7025, APO AE 09822-7025 (2)

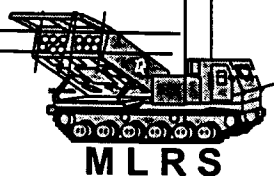
Office of Defense Cooperation, The Hague Netherlands, Box 3, UDC/ULCC, PSC 71, Box 1000, APO AE 09715 (2)

Government of Israel, Ministry of Defense (GOI/MOD), Mission to the United States, LTC Nati Sabovitz, 800 Second Avenue, 11th Floor, New York, NY 10017 (2)

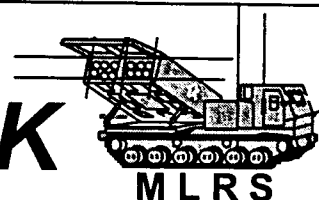
Office of Defense Cooperation, Greece, ATTN: ODC/SA, PSC 108 Box 42, APO AE 09842 (2)

Mutual Defense Assistance Office, U.S. Embassy, ATTN: LTC Charlie Stead, MDO-21, Tokyo, Japan (2)

Office of Military Cooperation, (Major Humphrey), American Embassy, Manama Bahrain, Box 270, PSC 451, FPO AE 09834-5100 (2)



MLRS FEEDBACK



Vol 12

June 1998

FROM THE PROJECT MANAGER...

I welcome this opportunity to communicate with you through the MLRS FEEDBACK Newsletter. It's my pleasure to serve as the Project Manager. The Project Office and the MLRS team of government and contractor personnel have established a reputation of excellence. I am anxious to continue to build upon that reputation through excellence in technical support, fieldings, logistics, and management of quality production and development programs. I look forward to providing first class customer service to the artillery soldier as we sustain the fielded system and develop improved capabilities.

- COL Barry M. Ward
Project Manager, MLRS

items' spares. MTS is accomplished via the spare part acquisition process. Spares acquisition spans a continuum from parts to components to subassemblies to assemblies for operational systems.

MTS is centered on performance based requirements and the emphasis is on Form, Fit, Function and Interface (FFFI). Performance based requirements allow the supplier greater flexibility and creativity than traditional contracting methods. MTS will use performance-based requirements to harness the variety and speed of change in the commercial marketplace to reduce life cycle costs while maintaining readiness and performance. Cost savings have priority over performance improvement.

HOT NEWS!!!

MODERNIZATION THROUGH SPARES (MTS)

What stands behind this magic word?

Declining procurement budgets are a significant challenge to maintaining a modern warfighting capability. Leveraged use of spares procurement funds is an important strategy to meet this challenge today and in the future. This development influences the U.S. Army as much as all armies worldwide. Modernization Through Spares (MTS) is one element of the U.S. Army's overall acquisition reform endeavor and focuses on the reduction of sustainment costs. Therefore implementation and management of MTS is the responsibility of all project managers, who develop systems or buy spares for existing systems. It is natural and essential that Program Executive Officers (PEOs) and Project Managers (PMs) incorporate MTS Strategies into their life cycle management program activities.

MTS is a spare part acquisition strategy applied throughout the materiel acquisition life cycle to reduce sustainment cost. It is based on technology insertion and the use of commercial products, processes, and practices to extend a system's useful life. Acquisition reform is the consequent response to the changes in the defense environment of the 90's. MTS seeks to improve end

Common procedures and data sources of all kinds were evaluated to lay out the strategy for the final implementation of MTS. In a complex process several working groups took a look at logistics and system data elements, potential opportunities, and especially at funding issues. Key element is a candidates list, prepared by a group of MLRS experts and awaiting the decision for the PM.

With this strategy, one important step towards the 21st century has been made. The success of MTS is based upon the acceptance of the "new way of doing business". Thinking out of the box, minimizing of administrative effort and a sensible feeling for emerging new technologies and processes are required. MTS will be the major tool to guarantee sustainability and affordability for aging weapon systems.

- LTC Manfred Mertes
DSN 795-6202

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MLRS LOGISTICS CENTER OF EXCELLENCE (LCOE)

Phase I (supply) LCOE at Ft. Sill is fully operational. MLRS LCOE consists of a centralized distribution facility. This is an AMCOM initiative that supports the DA goals applicable to Velocity Management, which will further reduce Order and Ship

Times (OSTs), Repair Cycle Times (RCTs), and Stockage Determinations. The LCOE prepositions wholesale assets forward to support the nine active MLRS battalions and the two Oklahoma Army National Guard battalions located within the Ft. Sill community. Phase I will reduce current OSTs from 24.5 to 7.2 days average which is below DA goals.

Phase II - Plans were to conduct depot level repair on selected item at the LCOE, however, research and analysis show repair of electronic secondary items is not feasible. Items for depot level repair will be repaired at Letterkenny Army Depot.

- Mr. Nathaniel Johnson
DSN 746-2116

E-mail johnson-na@redstone.army.mil

required to reach aim point from the stowed position (from 93 seconds to 16 seconds, worst case), and reload time (from 260 seconds to 160 seconds).

- Ms. Jimmie Pittman
DSN 746-9867

E-mail pittman-jl@redstone.army.mil
Or

- LTC Stephen Kreider
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M270A1 TRAINERS

There are currently four M270A1 trainers planned to support the training of both Military Occupational Specialty (MOS) 13M and MOS 27M. These trainers will provide state of the art training that will improve retention of student knowledge and reduce operational maintenance costs.

An M270A1 Fire Control Panel Trainer (FCPT) is currently under development by AMCOM Software Engineering Directorate (SED). This FCPT will be similar in capability to the current M270 Tactical Proficiency Trainer (TPT) and will allow all three modes of operation available on the TPT: Institutional Mode (Connected to an Instructor Station), Stand-Alone Mode (Students can train independently) and Free Play Mode (Connected to FDS).

The M270A1 FCPT will be a personal computer (PC) based trainer with touch screen technology rather than the current tactical like look of the TPT. This PC based trainer will offer additional flexibility, increased supportability and will make incorporation of changes much easier and faster.

Delivery of four initial prototypes will occur to support the M270A1 Operational Test (OT). Delivery of production units will begin at USAFAS in FY01 and will continue as M270A1s are fielded to Active Army and National Guard units (3 FCPTs per battery). Units that currently have TPTs will have them replaced on a one for one basis with M270A1 FCPTs as they receive M270A1 launchers.

An M270A1 Diagnostic Trainer (DT) is under development by PM TRADE (STRICOM). The M270A1 DT will be used at US Army Ordnance Missile and Munitions Center and School (OMMCS) to assist in the training of MOS 27M. The M270A1 DT will replace the current M270 panel trainer. The DT will be a computer based 3D simulation of the M270A1 launcher. The DT will be used to teach troubleshooting and fault isolation skills. The DT will be highly adaptable (new tasks or components can be easily added) and provide a much higher level of fidelity compared to the existing M270 panel trainer at OMMCS. Delivery of the first classroom of M270A1 DTs (1 Instructor

PROGRAM STATUS

IMPROVED LAUNCHER MECHANICAL SYSTEM (ILMS) UPDATE

Excellent progress is being made in the qualification testing of the ILMS individual components. Subsystem level tests are scheduled to be completed by 15 Aug 98. The M270A1 Logistics/Maintainability Demonstration is scheduled to be conducted at Lockheed Martin Vought Systems (LMVS) during the Oct 98 to Jan 99 timeframe and will include both Improved Fire Control System (IFCS) and ILMS maintenance tasks.

The M270A1 Extended System Integration Test (ESIT) is scheduled to begin Jan 99 and conclude Feb 99. This test will include the integration of IFCS and ILMS software. The M270A1 Operational Test and Evaluation (OT&E) is scheduled for the Aug - Sep 99 timeframe. The projected fielding schedule remains at 4th QTR FY00 for First Unit Equipped (FUE) with M270A1 Launchers.

The Power Take Off (PTO), Fan Speed Control Valve (FSCV), the Swivel Assembly, Heat Exchanger, and the Modified Launcher Interface Unit (LIU) have each successfully completed qual testing. The Hydraulic Pump has successfully completed qual tests except for the sand, dust, and cleaning spray tests. The remaining ILMS components are scheduled to complete qual testing by 15 Aug 98. The Final Configuration Audit (FCA) for the Modified LIU was completed 7 May 98 with only minor action items to be resolved.

Component qualification tests indicate that all major performance requirements for decreasing timelines for fire mission and reload are being met or exceeded. ILMS provides for enhanced soldier survivability due to the significant time

Station and 6 DTs) will occur in 1 QTR 01 and will continue to phase in until the last M270 panel trainer is replaced in 1 QTR 07.

An M270A1 Launcher Loader Module (LLM) Mockup Trainer is also currently under development by PM TRADE. The M270A1 LLM Mockup Trainer will assist OMMCS in training MOS 27M in mechanical, motor and cognitive skills that cannot be taught on the DT. It will be a modification kit applied to the current M270 LLM Mockup Trainer at OMMCS and will be controlled by a simulated M270A1 FCP.

Modification of the first two M270 LLM Mockup Trainers will occur in 1 QTR 01 and will continue to be phased in until the last M270 LLM Mockup Trainers will be modified in 1 QTR 07.

An M270A1 Organizational Maintenance Trainer is being planned to support USAFAS organizational maintenance training for MOS 13M. This trainer will be a modification of the M270A1 Diagnostic Trainer being developed to support OMMCS MOS 27M training and will make maximum reuse of that development effort. This computer based 3D representation of the M270A1 will allow USAFAS instructors a high degree of flexibility in training by providing a type of tool that they currently do not have.

Delivery of four classrooms to USAFAS will occur in 1 QTR 05. Each classroom will consist of 1 Instructor Station controlling 12 Student Stations.

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INTEGRATED SUSTAINMENT MAINTENANCE (ISM) PROGRAM

By now many of you on CONUS installations have been the recipients of major components (Bradley as well as for other weapons systems). Repaired by your Local Sustainment Maintenance Manager (LSMM) under the ISM program. The ISM program is a HQDA approved, Inter-MACOM, logistics business process initiative to centralize management of General Support (GS) level repair programs thereby leveraging GS capacity and capability. ISM features two distinct types of programs as follows:

- a. Maintenance activities compete for regional-wide GS Repairable Exchange (RX) production allocation, performed to Inspect and Repair Only As Necessary (IROAN) (TM-34) repair standards. Items are warranted for 30 days after installation.
- b. Maintenance activities also compete for repair of national-level components identified by item managers. These repair

programs are to a detailed scope of work and the resulting warranty can be up to one year from date of installation.

Unfortunately, when you have a problem with a component repaired by your LSMM, many of you are not aware of who to contact for such repair, or who to report the problem to, or what warranty may apply. If you cannot resolve the problem locally, your next step is the Regional Sustainment Maintenance Manager (RSSM) or failing that, the National Sustainment Maintenance Manager (NSMM) is available to hear your concerns. One thing you should keep in mind if you discover a problem with an ISM repaired component – SUBMIT a Quality Deficiency Report (QDR). For one thing, those components are warranted from thirty days to one year from date of installation. If a problem is discovered in that time, you have the recourse of having that fault corrected. Secondly, if you don't submit a QDR no one will know of problems you've encountered and will assume all is well. Business rules and procedures are in place to ensure the ISM quality assurance program meets your requirements. Help them make the system responsive.

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HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS) TECHNOLOGY DEMONSTRATION TEST FIRING

The first firing was successfully conducted on 20 May 98, at White Sands Missile Range. Two single-rocket missions were fired at 90 degrees azimuth (left side), one at 51 degrees elevation and the other at 11 degrees elevation. After verifying data collection and safety, a three round ripple was fired at 90 degrees left azimuth at each of the two elevations. Preliminary data and physical examination indicate nominal performance by the launcher, with no noted malfunctions or damages.

The second firing iteration was conducted on 27 and 28 May 98. On the 27th, two three-round ripple missions were fired, followed by a six-round ripple. All three missions were at 90 degrees azimuth (left side) and approximately 22 degrees elevation. In the six-round mission, fuzes were set and warhead event was successful on all rockets. On 28 May, a single rocket, a three-round ripple and a six-round ripple were fired at 60 degrees azimuth (left side) and 22 degrees elevation. Preliminary data and physical examination indicate nominal performance by the launcher, with no noted malfunctions or damages.

Only MLRS M28 practice pods were fired and all launches were fired from the side of the HIMARS prototype launcher. The maximum range of the initial rocket firing was 35 KM. The second rocket fired flew at a minimum range of 17 KM. The

initial ripple firing consisted of three rounds fired at a range of 35 KM and the second ripple firing at a range of 17 KM. All test objectives were met.

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EXTENDED RANGE MLRS (ER-MLRS) – SELF DESTRUCT FUZE (SDF)

From 30 March to 2 April 1998, SDF Design Verification Test (DVT) was conducted at White Sands Missile Range. The purpose of the DVT was to confirm the performance of the SDF for type classification and use in the ER-MLRS. Six rockets were fired in three missions: two were conditioned cold and fired to 16km (short-range); two were at ambient temperature and fired to 25km (mid-range); and the last two were conditioned hot and fired to 48km (long-range). The following results were obtained: (1) both cold/short-range rockets successfully functioned at the correct range; nine duds out of 1012 grenades were found for an .88% dud rate; (2) both ambient/mid-range rockets successfully functioned at the correct range; two duds out of 1014 grenades were found for an .20% dud rate; and (3) only one hot/long-range rocket functioned successfully; there were five duds out of the 461 grenades recovered for an 1.1% dud rate. The other hot/long-range rocket had no warhead event; failure analysis of this rocket indicated a possibly bad capacitor in the nose fuze. Total dud rate for all five missions was .64%, well within the less than 1% Operational Requirements Document.

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EXTENDED RANGE MLRS (ER-MLRS) – PROCURMENT DECISION

An IPR was conducted with the PEO on 24 April 1998 to review the self-destruct fuze (SDF) development program and to decide the strategy for ER-MLRS rocket procurement in the FY98-FY01 time frame. The following points were discussed:

The results of the Design Verification Test series of rocket flights verified that the SDF meets the less than one percent hazardous dud rate (HDR) requirement found in the ER-MLRS and Guided MLRS (GMLRS) Operational The results of the Design Verification Test series of rocket Requirements Documents. Results of the DVT were verbally confirmed by OPTEC and will be used to type classify the XM85 grenade for use in MLRS rockets.

The production readiness assessment of the SDF high rate equipment and subsequent production ramp-up time determined that the SDF will not be available to support loading of XM85 grenades into the FY96 and FY97 ER-MLRS Low Rate Initial Production (LRIP) quantities. Therefore, procurement of SDFs to support these LRIPs is not required and the current loading of M77 grenades into FY96 and FY97 LRIP rockets will continue. This results in over 61% of the planned ER-MLRS rocket procurements being loaded with the M77. Any replacement of these rockets could be accomplished later with the more capable GMLRS, the Army's objective area fire support rocket system.

Currently, the SDF cost exceeds Army budget. SDF production contract negotiations resulted in a multitude of unit prices from the SDF contractor, ranging from \$12.94 to \$10.59, depending on order quantities. All of these prices exceed the Independent Government Cost Estimate of \$8.05. It is not cost effective to procure SDFs at the higher projected price in support of the FY98 through FY01 ER-MLRS procurements.

Projected cannon and rocket quantities in FY02 and beyond will require full rate production of the SDF, with corresponding price decrease to approximately \$8.00 or less each after FY04. This decrease in unit price will support loading of the XM85 into GMLRS rockets.

As verified by the ER-MLRS Warm Line Study, conducted independently by the Missile ARDEC, contractor costs to maintain the ER-MLRS production capability in a "warm" status are estimated to be \$6.6M per year. This warm line will maintain the manufacturing equipment required for GMLRS production, as well as ensuring that the capability to produce ER-MLRS rockets remains as a war contingency. Projected Foreign Military Sales (FMS) cases will contribute to maintaining this production capability.

Based on the above facts/conditions, the Acquisition Decision Memorandum directed that MLRS PMO provide the warfighter with as many ER-MLRS rockets as economically feasible, and to ensure that the Lockheed Martin Vought System ER-MLRS production capability at Camden is maintained as a war contingency and to support the start of GMLRS production in FY02. In support of this direction, the following actions are planned:

The process to type classify the M85 grenade will continue. The SDF HRE will be completed in support of SDF production in the GMLRS program.

A strategy will be developed to a possible alternate/second source for a SDF in the GMLRS program. This strategy should focus on an independent European development effort.

SDFs for the FY96 and FY97 ER-MLRS LRIP rocket quantities will not be procured. These LRIP quantities will continue to be loaded with M77 grenades. FY96 and FY97 funds currently budgeted for procurement of the SDF will be utilized to procure additional rockets.

The required quantity of FY98 rockets will be procured, contingent on obtaining sufficient FMS cases to make the US buy affordable. The goal is to combine the FY98 quantity with the quantities procured with the additional FY96 and FY97 funding to procure a total of 1,000 to 1,200 rockets. The rockets procured with the FY98 and additional FY96 and FY97 funding will be loaded with XM85 grenades if the following two conditions are met:

- The SDF unit price is well under \$11.
- Sufficient FMS production is available to facilitate the start of production of these rockets after the SDF is available for loading (i.e., January 2000).

If these conditions are not met, all rockets will be loaded with the current M77.

The ER-MLRS manufacturing capability will be placed in a warm line state in FY99 through FY01. Sufficient funds will be budgeted in the rocket procurement line for contractor costs, program support and stockpile reliability testing. Contractual provisions will be established that will convert warm line funding to procure ER-MLRS rockets for the U.S. Army if FMS production occurs in any of these three years.

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GUIDED MLRS (GMLRS)

Activities continue in preparation for GMLRS Engineering and Manufacturing Development (EMD) contract award in mid-June 1998. The GMLRS rocket will incorporate low cost guidance technology on a version of the Extended Range-MLRS rocket. Housed in the rocket's nose section, the guidance set will significantly improve rocket delivery accuracy out to a range of 60km. GMLRS EMD is scheduled for 48 months and will be a multinational program, including the US, the UK, France, Italy and Germany. GMLRS rockets are scheduled to be delivered to the field in FY03.

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EXTENDED RANGE MLRS – PRODUCTION QUALIFICATION TEST

The M26A2 Extended Range MLRS (ER-MLRS) Production Qualification Test (PQT) has started. Four rocket pods were flight tested in April 1998. All flight tests have been successful. All of the ER-MLRS rockets performed nominally. The MLRS Fire Control System (FCS) software experienced an anomaly during one flight test. The FCS software anomaly is under investigation. The flight tests include rocket pods that have been subjected to thermal and vibration conditioning. Fifteen ER-MLRS rockets are scheduled to be flight tested in June 1998. The PQT flight testing continues with three cold conditioned rockets and three ambient rockets scheduled 5 June 1998. Three cold, three hot, and three ambient conditioned rockets are also scheduled for flight testing on 17 June 1998. Successful completion of these PQT flights will result in a material release to field the M26A2 to US Forces Korea.

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TECHNICAL INFORMATION

DON'T BE CONFUSED BY NEW REDUCED RANGE PRACTICE ROCKET ROCKET PODs (RRPR RP)

You may be confused if you receive some RRPRs with the W70 electrical harness on the launch tubes. DON'T BE!!

There are two (2) recent lots of RRPR RPs that will exhibit the electrical harness on the exterior of the launch tubes. You will think they are M26 (Tactical) or M28 (Practice) RPs, but they are not. The numbers for these two lots are VGT97M070M223 and VGT98B070M224. All markings, stencils, color codes, etc., on the exterior of the RP will indicate a RRPR pod. However, electrical harness just looks out of place!

The U.S. Army contracted with Lockheed Martin Vought Systems to download condition code "F" M26 RPs and rework them into M28A1 RRPR RPs. The rockets were removed and demated. New RRPR warheads were fabricated and jointed to the demated motors. The umbilical on the W70 harness was cut flush to the interior of the tube, but the remainder of the harness was left attached to the exterior of the launch tubes. The aft end of the harness was severed at the end of the conduit and replaced by the W110 harness for the RRPR. The joined rockets were then loaded into the RP and completed.

Something else is unusual on these RPs. Due to long lead time for some of the items for the W110 harness, LMVS modified some spare W70 harnesses to meet the functional requirements of

a W110. This will be exhibited by the unusually long igniter leads. The distance from the end of the connector at the bracket on the aft bulkhead to the igniter connector at the launch tube is 170 mm longer for the W70 than for the W110. Therefore, these 170 millimeters (6.7 inches) had to be wound back and forth (like a long waiting line at the rides at Six Flags Over Texas or Disney World or any other popular Amusement Park) on the launch tube to secure the extra length.

These rockets and RPs will perform just like any other RRPR, even though they are a little different.

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CARRIER TRANSMISSION IMPROVEMENTS

Plans for improvements to the M270's carrier transmission are underway. Within the last several years some units have identified excessive failures with the Hydro-Mechanical Power Transmission 500-3EC. In Jun 97, a task force directed by Bradley Fighting Vehicle Systems Project Office began an intensive test program to define changes required to make this transmission system operate better under MLRS operating conditions. The investigation concluded that the new Transmission Electronic Controller (TEC) components, the Electronics Assembly and the Interface Assembly be modified to prevent vibration and better control steer gain. This modification known as the MLRS TEC II program is planned to begin in FY99. During the M270A1 Remanufacture program, an additional program known as TEC III will apply internal hardware components to the transmissions as they are remanufactured for incorporation into the new M270A1.

The information contained in the "Transmission Operation of the M270 Launcher" article in Volume 10 and 11 (June 1997 and January 1998) issues of the *MLRS Feedback* is still valid. Until the initial modifications have taken place, the M270 drivers/operators need to adhere to the following instructions:

Do not engage transmission under high engine speed conditions. Engine should be at or near idle when transmission engagements are made.

When conducting low speed maneuvers such as moving around the motor pool or loading the vehicle onto a transporter, it is best to conduct these operations in "Low Range" to obtain smooth operation.

When conducting a pivoting operations, first engage the transmission, then apply throttle, and then apply steering slowly for smooth operation.

When making "fine-tuning" vehicle direction adjustments for mission firing, it is best to conduct the operation in pivot mode, as noted in Recommendation #3.

The transmission operates better warm than cold. When possible, operate in low range for the first 5 minutes of movement.

Specific transmission questions can be addressed by using new Toll-Free Hot Line. This Hot Line previously located at GDDS-Pittsfield, MA has been relocated to GDLS-Muskegon, MI. The phone is normally manned during normal working hours. If not, leave your name, commercial phone number, and a brief description of your question or problem, and you will be contacted with an answer.

The hot line numbers are as follows:

USA	1-800-229-3458
Germany	0130-81-8694
South Korea	0078-16-800-7547

For M270 users at Fort Sill, Oklahoma calls can be directed towards the GDDS Field Service Representative (FSR), Mr. Dave Lewis at 405-442-4961 / 3765 or DSN: 639-4961 / 3765. For more technical information from the MLRS Project Office call Mr. Steve Bramlett, DSN: 746-7832, E-mail: < bramlett-se@msl.redstone.army.mil > or Mr. Larry Gunter, DSN: 746-8296, E-mail: < gunter-lr@msl.redstone.army.mil >. For logistical information call CW3 Jerry Gage, DSN: 897-2222, E-mail: < gage-ga@msl.redstone.army.mil > or Mr. Steve Bruens, DSN: 746-1518, E-mail: < bruens-sw@msl.redstone.army.mil >.

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UPCOMING MODS

ENGINE COMPARTMENT FIRE SUPPRESSION SYSTEM (FSS) CHANGE-OUT

This modification is the second of a two part modification, the first part being the removal of the hand held halon fire extinguisher(s) located in the cab of the launcher. Environmental regulations have banned any additional production of our current fire suppression agent, Halon 1301. Bradley Fighting Vehicle Systems (BFVS) Program Management Office (PMO) has identified the agent, FM-200, as the preferred replacement for all Bradley and Bradley derivative systems.

The FM-200 chemical agent testing has been completed at Aberdeen Proving Ground, MD. Application is due to begin in some locations as early as Aug 98. Once your launchers have been converted to FM-200, DO NOT refill expended bottles with Halon. Your support unit will be issued spares.

IMPROVED ELECTRONICS BOX (IEB) MODIFICATION

The IEB modification has been developed to drastically reduce the failure rates of several of the MLRS Line Replaceable Units (LRUs). Using units have identified very high failure rates on several LRUs, but studies have shown that the failures were erroneous, called No Evidence of Failure (NEOF) by the

responsible depot. Engineers have identified through bypassing the K3 relay in the IEB, most of these NEOFs will not appear.

A modification program has been approved that will modify the IEB in the launcher and spares will also be modified on-site. This modification is considered one of the three most significant upcoming modifications to lower the cost of ownership. This should translate into much higher savings by the using units, by reducing their support costs. Modifications are anticipated to happen in early FY99.

COMMUNICATIONS PROCESSOR (CMP) MODIFICATION

An analysis is still in-process to consider modifying the CMP. Currently the CMP does not adhere to the correct interface control document defining protocol for Fire Direction Systems. This problem, known as the "Net Access Delay" problem, as a minimum will require modification of the Communications Controller Circuit Card Assembly in the CMP and possibly the Improved Electronics Unit. This potential modification will only be applicable to the M270 Launcher. If approved for retrofit, modification will be implemented as soon as possible, more than likely involving a swap-out problem.

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MLRS MAINTENANCE INFORMATION BULLETIN #98001 MLPA TRAINER TUBE COVERS

Ref: TM 9-6920-647-24P, Fig. 8, Item 1

1. Referenced cover, PN 13027969, is now available in the supply system under NSN 5340-01-434-4698. The cover is listed in FEDLOG, but the unit of issue is incorrect. The correct unit of issue is each. They are not issued as a package of six.

2. Procedures for replacing the covers are as follows:

Task: Replace Forward and Aft Covers

**CAUTION: NOT FOR TACTICAL ROCKET POD
INSTALLATION** - Use of this procedure on tactical rocket pods could result in rocket launch failure.

Removal of Loose or Damaged Covers:

1. Using a scraping knife, score/cut old adhesive between cover and launch tube.
2. Using pry bar, carefully pry/pull on edge of cover until cover separates from launch tube.

WARNING

Isopropyl alcohol vapors are toxic. Avoid prolonged or repeated breathing of vapors or contact with skin. Use only with adequate ventilation. Solvent is flammable and should not be used near open flame. Fire extinguishers should be readily available when isopropyl alcohol is used.

Existing Cover Installation Preparation:

1. Using #80-120 grit sandpaper, sand inside of cover (mating surface only) to remove old adhesive and permit new adhesive bonding.
2. Clean sanded area with isopropyl alcohol.

New Cover Installation Preparation:

1. Sand inside of cover (mating surface only) to permit adhesive bonding.
2. Clean sanded area with isopropyl alcohol.

Launch Tube Preparation for cover Installation:

1. Sand outer dimension of launch tube end to remove existing adhesive, and permit new adhesive bonding.
2. Wipe sanded area with isopropyl alcohol.

Installation of Cover to Launch Tube:

1. Apply fillet of adhesive to cover, in area that will contact launch tube.
2. Apply adhesive to outer dimension at end of launch tube, (thickness as required to obtain squeeze out around entire circumference of cover).
3. Push cover completely on launch tube.

4. Inspect for 100% squeeze out of adhesive on flange cover.
5. Using soap/water solution, use finger to smooth adhesive to a flat head.
6. Use tape to secure cover in place, with an X-pattern.
7. Allow adhesive to cure for 24-hours.
8. Remove tape after cure time has expired.

These changes will be included in the next change to the TM.

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MLRS MAINTENANCE INFORMATION BULLETIN #98002 ELECTRONICS UNIT (EU)

Ref: TM 9-1425-648-24P, Fig 220, Item 7

Referenced TM lists three versions of the EU as follows:

1055-01-300-8212	PN 13032368
1055-01-336-9616	PN 13210269
1055-01-436-0004	PN 13210255

EU PN 13032368 is not being issued to the field (no serviceable assets on hand) even though it is two way interchangeable with EU PN 13210269. Both of these EUs contain the Bubble Storage Memory Unit (CCA 2A1 and 2A2).

EU PN 13210255 contains the Non Volatile Memory Module (NVMM) CCA 2A14. This EU is currently planned for use only in the IPDS launchers. There are no plans to upgrade the 13210269 EU to the NVMM version since there are sufficient quantities of the BSMU CCAs to sustain the current demands.

Several EUs containing the NVMM were inadvertently issued to some field units. Since there is no test capability in the field for this EU it must be turned in when it fails. Turn-ins will be replaced with the BSMU version of the EU. This in no way degrades the operation of the launcher.

Action has been taken to dissolve the relationship between the BSMU version of the EU and the NVMM version of the EU. The TM will be changed to reflect the correct usage and FEDLOG will be updated to reflect the correct Acquisition Advice Code. In the meantime, any requisition for NSN 1055-

01-436-0004 will be filled by NSN 1055-01-336-9616. Care must be taken when turning in these EUs to ensure they are turned in under the correct stock number. Please ensure shipping label and asset reflect the same NSN.

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CLEANING INSTRUCTIONS FOR SENSITIVE LINE REPLACEABLE UNITS (LRUS)

Do not use high pressure water or steam to clean interior and rear of Launcher Loader Module (LLM), or carrier vehicle bed. Water may penetrate electrical equipment to include LRUs and cause damage. Do not flood the vehicle bed. When washing the LLM, refer to after fording paragraph in carrier operator's manual (TM 9-1450-646-10) and remove drain plugs.

Use light spray of water at normal tap pressure, but not more than 350kpa (about 50psi), to clean interior and rear of LLM and carrier vehicle bed and equipment in it.

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**HEY STEEL RAIN MAKERS
MLRS LINE REPLACEABLE UNIT (LRU) WEATHER
PROTECTION
MLRS BATTERY CHECKS**

The M270 MLRS is normally parked in garrison motor pools and subjected to all elements of nature. MLRS is an all weather attack System, however, LRU components do not fair well in the elements. The use of tarpaulin NSN: 8340-00-841-6455 will reduce the number of electronics component failures experienced in the field, thereby reducing the cost of ownership. This information will be in the next revision of TM 9-1425-646-10-2; Appendix C, Section II scheduled for June 98.

The M270 MLRS Technical Manuals (TMs) lack specific guidance when LRU failure indications illuminate on the Fire Control Panel; the manual does refer operators to Table 3-3, Step 21, Substep 2 to perform battery checks, however, no specific instructions are found. The pertinent information is provided in TM 9-6140-200-14.

NOTE: Lead-Acid Battery gases can explode. Do not smoke, have open flames or other ignition sources, or make sparks around a battery, especially if the caps are off. If a battery is gassing, it can explode and cause injury to you.

NOTE: The following information is extracted from TM 9-6140-200-14 as guidance for performing the required battery electrolyte specific gravity test:

Tester Optical Battery and antifreeze device, NSN: 6630-00-105-1418 must be used, it can be found in General Mechanics Tool Kit or Mechanics Support Tools.

The plastic cover and measuring window of the tester must be clean and dry. Wipe clean with soft cloth. Thoroughly clean the eyepiece lens with clean clear water.

NOTE: Keep the plastic cover against the measuring window when testing. A faulty reading could be obtained if the electrolyte sample begins to evaporate.

Swing the plastic cover down until it rests against the measuring window.

Test the battery before adding water.

Perform a separate test for each battery cell.

WARNING

To prevent injury to personnel or damage to equipment, be careful not to splash electrolyte during battery testing.

Using the black dipstick, place a few drops of electrolyte on the exposed portion of the measuring window. (See applicable Battery TM)

Point the tester toward a bright light source. Look into the eyepiece and locate the rectangle with two calibrated scales. Battery charge readings are taken from the left scale and anti-freeze are taken from the right scale.

The Electrolyte sample will divide the rectangle into an area of light and an area of shadow. Read the scale where the light and shadow meet. The acceptable full charge and minimum charge specific gravity limits shall be as follows:

Full Charge Specific Gravity.

Tropical Electrolyte 1.225
Temperate Electrolyte 1.280

Minimum Charge Specific Gravity

Tropical Electrolyte 1.180
Temperate Electrolyte 1.225

If electrolyte is below the minimum charge specific gravity listed above, replace the battery with one that is fully charged. If field charging is allowed, charge and re-test battery.

NOTE: The Battery check requirements will become outdated upon fielding of the M270A1.

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TECHNICAL PUBLICATIONS

By Email: Send your comments/facsimile DA Form 2028 to the following email address:

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RECENT MLRS REVISIONS/CHANGES RELEASED

The following revisions/changes to the MLRS library have been released for printing and distribution:

PUBLICATION NUMBER/ACTION	SHORT TITLE	PRINT DATE*
TM 9-1425-646-10-1 /Revision	Op Manual for Launcher, Vol. 1	30 Apr 1998
TM 9-1425-646-10-2 /Revision	Op Manual for Launcher, Vol. 2	30 Apr 1998
TM 9-1425-646-20 /Change 2	Org Maintenance for Launcher	29 May 1998
TM 9-1425-646-30-1 /Change 7	DS Maintenance for Launcher, Vol. 1	15 May 1998
TM 9-1425-646-30-2 /Change 4	DS Maintenance for Launcher, Vol. 2	15 May 1998
TM 9-1425-648-24P /Change 1	Org, DS, & GS RPSTL for Launcher	26 May 1998
DMWR 9-1425-646-19 /Basic	Hoist Control Box	May/Jun 1998
DMWR 9-1425-646-10 /Revision	Hoist Assembly	May/Jun 1998

* Dates are approximate

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ADDRESSES FOR SUBMITTING DA FORMS 2028

DA Forms 2028 (Recommended Changes to Publications and Blank Forms) for AMCOM (formerly MICOM) managed maintenance manuals should be submitted using one of the means listed below:

By Mail: The DA Form 2028 should be sent to the following address:

Commander
U.S. Army Aviation and Missile Command
ATTN: AMSAM-MMC-LS-LP
Redstone Arsenal, AL 35898-5238

By Fax: The DA Form 2028 should be faxed to the following number:

Commercial: 256-842-6546 or DSN: 788-6546

These are the last MLRS changes scheduled to be issued in paper. Henceforth, all changes, revisions, and new documents to the MLRS library will be issued in electronic format on CD-ROM. Local commands may request paper operator manuals (TM 9-1425-646-10-1 and TM 9-1425-646-10-2) through the St. Louis Printing Command at *their own cost*. Once the MLRS library has been converted to class III Interactive Electronic Technical Manuals (IETMs), paper copies of the Operator manuals will not be an option because of the thorough meshing of all maintenance levels within the IETM.

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FIELDINGS

FIRE CONTROL PANEL- TACTICAL PROFICIENCY TRAINER (FCP-TPT)

Fielding of the FCP-TPT draws to a close. Units remaining to be fielded are 1-77th FA, Fort Sill, Oklahoma, 1-21st FA and B-20th FA in Fort Hood, Texas. Units now need to fully utilize this training tool. Additionally, the unit should remember the maintenance points of contact for support of the FCP-TPT.

The maintenance support concept does not authorize the unit to repair the FCP-TPT. The maintenance support will be provided by contractor logistics support. The points of contact for software and hardware maintenance problems were provided to each unit during the fieldings. These points are provided below for continuity.

For Hardware Problems:

Contact: Mr. Paul Kondrk
DME Corporation
Building 3307, Room 221
Redstone Arsenal, Alabama 35897-6720
Phone: (256) 881-0428

For Software Problems:

Contact: Software Engineering Directorate
ATTN: AMSAM-RD-BA-ML/MLRS Trainers
Redstone Arsenal, Alabama 35898

Points of Contact: Ms. Elline Binner or Mr. Robert Walls
Phone: (256) 876-9290 DSN 746-9290

These points of contact should be contacted directly to resolve maintenance issues and problems.

Additional information that will help sustain the operational life of the FCP-TPT are:

- The FCP-TPTs are a commercial piece of equipment and should be handled as such. They should be stored in their transit cases in an area that affords protection from the environment.
- Use the transit cases when transporting the trainers and exercise care when loading and unloading the trainers into their transit case.

- MAJ Gwen Dingle
DSN 788-0339

E-mail dingle-go@msl.redstone.army.mil

Mechanical System (ILMS). After FY00 two of the remaining three CAB fieldings are planned to be fielded with the M270A1 Launchers. First is A Btry, 38th FA (MLRS) and F Btry, 26th FA (TAB) to 1-38 FA to be fielded in FY01 to the 2nd Infantry Division in Korea. In FY03, the 1st Armored Division in Germany, currently composed of A Btry, 94th FA (MLRS) and C Btry, 25th FA (TAB) will become 1-94 FA. The last divisional battery conversion, in FY03, will initially be fielded as a M270 CAB unit to 1st Mechanized Infantry Division where A Btry, 33rd FA (TAB) and B Btry 25th FA (TAB) will become 1-33 FA. In

FY05, these 1-33 FA M270 launchers will be swapped out for M270A1 launchers. 1-21 FA and 1-39 FA will have their M270s swapped out with the M270A1 launchers in FY04 and FY05 respectively.

- MAJ Charles S. Basham Jr.
DSN 788-0339

E-mail basham-cs@redstone.army.mil

COMMAND & ATTACK BATTALION UPDATE

The second MLRS fielding for the Command & Attack Battalion (CAB) will take place this month at Fort Hood, TX to the 4th Mechanized Infantry Division. This program, also known as the MLRS "2x9" battalion, began last summer with a fielding to 1st Cavalry Division at Fort Hood, TX. This fielding merged a new MLRS battery with the existing MLRS Battery, A Btry, 21st FA and the Target Acquisition Battery (TAB), B Battery, 26th FA. The new unit is now known as 1st Bn, 21st FA (1-21 FA). The change to 4th Mechanized Infantry Division's structure will be fielding of a new MLRS battery and conversion of B Btry, 20th FA (MLRS) and A Btry, 26th FA (TAB) to form 2-20 FA.

The CAB program will not be unique to 1st Cavalry Division or 4th Mechanized Infantry Division, but over the upcoming years, fieldings will take place to all of the current "heavy" divisions within the active army, bringing them to 18 launcher units. The decision to go forth with this plan was made in February 1996 by the Vice-Chief of Staff of the Army. The force structure change was based on analysis from several high level review boards that concluded that there was a requirement for additional firepower within the divisions.

The next CAB fielding is scheduled for FY00, when A Btry, 13th FA (MLRS) and A Btry, 39th FA (TAB) at Fort Stewart, GA will be converted to 1-39 FA. Also in FY00, 2-20 FA at Ft. Hood will become the first unit equipped with the upgraded M270A1 launcher through a swap-out with their M270 launchers. These M270A1 launchers will include the upgrades provided by the Improved Fire Control System (IFCS) and Improved Launcher

SUPPLY INFORMATION

ALUMINUM BACKED TRACK PADS

MLRS users are authorized only aluminum backed track pads because of the vehicle's weight restriction. They should use advice code 2B, NSN 2530-01-300-1681 on the requisition. The requisitions will go on backorder. Deliveries for the aluminum backed pad are projected for Jul 98. Again, when requisitioning for the MLRS please use advice code 2B. Advice code 2B means "do not substitute". Requisitions with this advice code will be filled with only the NSN that is requisitioned.

- Ms. Kathy Miromonti
BFVS-PMO Logistics
TACOM
DSN 786-7725

E-mail miramonk@cc.tacom.army.mil

RETURN OF UNSERVICEABLE ASSETS

The following items are in a critical supply position and continued supply support is dependent upon timely turn-in and repair of these items. Request the return of these unserviceable items be expedited in accordance with ARIL procedures, to support current and future requirements.

NSN	NOMENCLATURE	POC
5998-01-386-6401	Circuit Card Assy	Melvin Mayo
6150-01-356-6999	Control Motor	Melvin Mayo
1055-01-092-0717	Tester Assy	Melvin Mayo
1055-01-109-7692	Azimuth Gear Bearing	John Peterson

- Mr. Melvin Mayo
DSN 746-6877

E-mail mlmayo@redstone.army.mil
Or

- Mr. John G. Peterson
DSN 746-4996

E-mail jpeterso@redstone.army.mil

CIRCUIT CARD TURN-IN

The Communications Controller (CC) Circuit Card Assembly (CCA) is a common CCA to both the Improved Communications Processor (ICMP) and the Improved Electronics Unit (IEU). The current required configuration calls for NSN: 5995-01-305-7759 (PN: 13032362) which is required for our Fire Control System to attempt to execute digital message traffic.

It has been reported that IEUs have been found containing CC CCAs bearing NSN: 1055-01-191-1623 (PN: 13033582). By using this CCA in either the IEU or the ICMP may greatly degrade the ability for the IEU to communicate with the ICMP. These obsolete CC CCAs were modified under MWO 9-1425-646-50-15 at depot between FY91-FY95. Concurrently during that time period all EUs were upgraded to IEUs under MWO 9-1425-646-50-13 and all CMPs were upgraded to ICMPs under MWO 9-1425-646-50-11.

Assets located within the MLRS supply and maintenance system bearing NSN: 1055-01-191-1623 (PN: 13033582) need to be turned in immediately.

- Mr. Steve Bruens
Perkins Technical Services, Inc.
DSN 746-1518
E-mail bruens-sw@redstone.army.mil

QUESTIONS??

SUGGESTIONS??

WRITE US!!

CALL US!!

WE WANT TO HEAR FROM YOU!!

MLRS TELEPHONE NUMBERS

Commercial Numbers are (256) 876-XXXX

E-mail addresses are xxx-xx@redstone.army.mil

OFFICE	FUNCTIONS	DSN	E-MAIL
PM	Programmatic	746-1195	Ward-bm
Logistics	Supply & Maintenance, Pubs, Mods	746-3779	Kingston-cb
Tech Mgt	Launcher, Rocket, Software Issues	746-4662	Crosswhite-bl
NEW PROGRAMS:			
Reduced Range Practice Rocket		746-9153	Reese-dc
Extended Range/Guided Rocket		746-5727	cox-sj
Improved Fire Control System		746-6311	Gregory-fb
Improved Launcher Mechanical System		746-2782	Kreider-sd

DISCLAIMER

The MLRS Newsletter is prepared with the stated purpose of providing a means of disseminating information concerning the MLRS as well as related issues such as its fielding, supportability, maintainability, and other items of significant interest. The contents are non-directive in nature and are not, under any circumstances, to be constructive as altering or superseding any official instructions, regulations or technical publications.

For more information on specific items, please contact Mr. Lee Chappelle or Ms. Teresa Gray. Comments or suggestions regarding the newsletter would be appreciated and may be referred in writing to:

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MLRS Project Office
ATTN: SFAE-MSL-ML-LO
Redstone Arsenal, AL 35898-5700**

Or by calling:

**DSN: 746-3678 or (256) 876-3678
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The next MLRS Newsletter will be published in January 1999. The final date for submission of all articles is 15 December 1998.